

What is claimed is:

1. An axial valve with a housing, an inlet, an outlet, a valve seat between the inlet and the outlet and a valve element cooperating with the valve seat, which valve element is controlled by a pilot valve arranged between the inlet and the outlet, wherein the valve element is moveable parallel to a flow path from the input to the output and surrounds an interior space, characterized in that a first section of the flow path leads through the interior space and a pressure space is arranged between the housing and the valve element, in which pressure space in the case of the pilot valve being closed a closing pressure working on the valve element is formed.
2. A valve according to claim 1, wherein the valve element is guided by a wall of the interior space on a guide which surrounds a second section of the flow path.
3. A valve according to claim 2, wherein the guide is fixed to the housing.
4. A valve according to claim 1, wherein the flow path runs through the valve seat.
5. A valve according to claim 1, wherein the valve element on its side facing the valve seat has a closed surface.
6. A valve according to claim 1, wherein the valve element is guided without seals in a housing bore.
7. A valve according to claim 1, wherein the pilot valve is arranged in a connection between a pressure space, in which prevails a pressure urging the valve element in the closing direction, and the outlet.

8. A valve according to claim 7, wherein the pressure space is supplied with pressure through a seepage path which stands in connection with the interior space.

9. A valve according to claim 8, wherein the seepage path is shortened upon opening of the valve.

10. A valve according to claim 7, wherein a spring working in the closing direction is arranged in the pressure space.

11. A valve according to claim 2, wherein the guide is arranged on the inlet side of the valve element.

12. A valve according to claim 2, wherein the guide is arranged on the outlet side of the valve element.

13. A valve according to claim 12, wherein the valve element has an enlarged diameter in the region of the guide.

14. A valve according to claim 12, wherein the housing has a radially oriented recess in the region of the pilot valve.